# CONTENTS

## Volume 63 Number 1 1981


V. Smetacek
The Annual Cycle of Protozooplankton in the Kiel Bight 1

J. Neveux, H. Jupin
Une approche vers l'estimation de la production potentielle du phytoplancton par analyse des cinétiques d'induction de fluorescence.
[An Approach to Estimating the Potential Productivity of Phytoplankton by Analysis of the Kinetics of Fluorescence Induction] 13

A. Hernandorena, S. J. Kaushik
Ammonia Excretion of *Artemia* sp. (Crustacea: Branchiopoda) Under Axenic Conditions) 23

E. López-Jamar
Spatial Distribution of the Infaunal Benthic Communities of the Ría de Muros, North-West Spain 29

B. B. Bernstein, B. E. Williams, K. H. Mann
The Role of Behavioral Responses to Predators in Modifying Urchins' *(Strongylocentrotus droebachiensis)* Destructive Grazing and Seasonal Foraging Patterns 39

J. M. Shick, W. F. Taylor, A. N. Lamb
Reproduction and Genetic Variation in the Deposit-Feeding Sea Star *Ctenodiscus crispatus* 51

D. R. P. Leonard, R. J. Pentreath
Further $^{237}$Pu Experiments with the Plaice *Pleuronectes platessa:* Subcellular Distribution of Plutonium in the Liver 67

J. E. Richards, F. W. H. Beamish
Initiation of Feeding and Salinity Tolerance in the Pacific Lamprey *Lampetra tridentata* 73

Y. Bouchon-Navaro, M. L. Harmelin-Vivien
Quantitative Distribution of Herbivorous Reef Fishes in the Gulf of Aqaba (Red Sea) 79

S. Imsand
Comparison of the Food of *Triphoturus mexicanus* and *T. nigrescens,* Two Lanternfishes of the Pacific Ocean 87

S. H. Coombs
A Density-Gradient Column for Determining the Specific Gravity of Fish Eggs, with Particular Reference to Eggs of the Mackerel *Scomber scombrus* 101


## Volume 63 Number 2 1981


J. Webb, P. Chrystal
Protein Binding of Iron in Blood Plasma of the Ascidian *Herdmania momus* 107

R. K. Okazaki, M. H. Panietz
Depuration of Twelve Trace Metals in Tissues of the Oysters *Crassostrea gigas* and *C. virginica* 113

T. Mann, A. W. Martin, J. B. Thiersch
Changes in the Spermatophoric Plasma During Spermatophore Development and During the Spermatophoric Reaction in the Giant Octopus of the North Pacific, *Octopus dofleini martini* 121

S. Baden, L. Hagerman
Ventilatory Responses of the Shrimp *Palaemon adspersus* to Sublethal Concentrations of Crude Oil Extract 129

B. E. Chalker
Simulating Light-Saturation Curves for Photosynthesis and Calcification by Reef-Building Corals 135

H. H. Donaubauer
Sodium- and Potassium-Activated Adenosine Triphosphatase in the Excretory Organs of *Sepia officinalis* (Cephalopoda) 143

M. E. Bergin
Hatching Rhythms in *Uca pugilator* (Decapoda: Brachyura) 151

K. S. Tande, C. C. E. Hopkins
Ecological Investigations of the Zooplankton Community of Balsfjorden, Northern Norway: The Genital System in *Calanus finmarchicus* and the Role of Gonad Development in Overwintering Strategy 159

H. Kaye, T. Ortiz
Strain Specificity in a Tropical Marine Sponge 165

C. M. Burney, K. M. Johnson, J. McN. Sieburth
Diel Flux of Dissolved Carbohydrate in a Salt Marsh and a Simulated Estuarine Ecosystem 175

P. J. W. Olive, P. R. Garwood, M. G. Bentley, N. Wright
Reproductive Success, Relative Abundance and Population Structure of Two Species of *Nephtys* in an Estuarine Beach 189

T. Loi
Environmental Stresses and Intertidal Assemblages on Hard Substrates in the Port of Long Beach, California, USA 197

R. T. Kneib
Reanalysis of Conversion Efficiencies for Larval *Fundulus heteroclitus* 213

# Volume 63 Number 3 1981


L. P. Madin, C. M. Cetta, V. L. McAlister
Elemental and Biochemical Composition of Salps (Tunicata: Thaliacea) 217

T. M. Dillon
Effects of a Dimethylnaphthalene-Contaminated Food Source and Daily Fluctuating Temperatures on the Survival Potential of the Estuarine Shrimp *Palaemonetes pugio* 227

R. J. Henderson, J. R. Sargent, S. Falk-Petersen
Lipogenesis in the Arctic Euphausiid *Thysanoessa inermis* 235

M. Żukowska-Arendarczyk
Effect of Hypophyseal Gonadotropins (FSH and LH) on the Ovaries of the Sand Shrimp *Crangon crangon* (Crustacea: Decapoda) 241

S.T. Tettelbach, E. W. Rhodes
Combined Effects of Temperature and Salinity on Embryos and Larvae of the Northern Bay Scallop *Argopecten irradians irradians* 249

G. Purschke
Tolerance to Freezing and Supercooling of Interstitial Turbellaria and Polychaeta from a Sandy Tidal Beach of the Island of Sylt (North Sea) 257

B. Dahlbäck, L. Å. H. Gunnarsson
Sedimentation and Sulfate Reduction Under a Mussel Culture 269

D. Marty
Distribution of Different Anaerobic Bacteria in Arabian Sea Sediments 277

J. E. Purcell
Selective Predation and Caloric Consumption by the Siphonophore *Rosacea cymbiformis* in Nature 283

K.W. Bruland, M. W. Silver
Sinking Rates of Fecal Pellets from Gelatinous Zooplankton (Salps, Pteropods, Doliolids) 295

D. M. Johns, W. H. Howell, G. Klein-MacPhee
Yolk Utilization and Growth to Yolk-Sac Absorption in Summer Flounder *(Paralichthys dentatus)* Larvae at Constant and Cyclic Temperatures 301

H. S. Parker
Influence of Relative Water Motion on the Growth, Ammonium Uptake and Carbon and Nitrogen Composition of *Ulva lactuca* (Chlorophyta) 309

Y. Morizur, G. Conan, A. Guénolé, M. H. Omnès
Fécondité de *Nephrops norvegicus* dans le golfe de Gascogne. [Fecundity of *Nephrops norvegicus* in the Bay of Biscay] 319

R. T. Riley, M. A. Shirazi, R. C. Swartz
Transport of Naphthalene in the Oyster *Ostrea edulis* 325




Indexed in Current Contents